Menlo Park Notebook #210 [N-81-00-03]

This notebook is undated but was probably used in 1881 or 1882. It contains notes by Edison relating to the geology of various states. Most of the material was copied from published geological surveys and other published works. The label on the front cover is marked "Magnetite etc" and "Iron Sand." The book contains 280 numbered pages.

Blank pages not filmed: 62-280.

Missing page numbers: 3-8.

Magnetic spirals ?
" Beds of iron?

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From Library
GENERAL ELECTRIC.
44 Broad St. N.Y.

May 1, 1896

Geological Survey State of New York 1840

Page 58 Clinton Co.

"The magnetic iron ores of this County
"are among the best in the state."
"The Arnold mine especially mentioned
"on account of quantity & quality."

Page 64 Essex County

"Enormous deposits of magnetic iron
"ore which are found in various
"parts of the County."

Page 66. Franklin County

"Magnetic iron ore, specular iron ore
"and bog iron ore".

Same

Page 69. Herkimer Co

"Vein is from two to eight feet wide and has been traced about three quarters of a mile. highly magnetic and yields iron of good quality."
Magnetic iron ore.

Page 71 Jefferson County

"There is a valuable bed of magnetic "ore in the southern part of the County"

Page 73 Lewis County

"Veins of magnetic iron ore are "found in the primitive rocks on "Moose and Black Rivers; extent "and value has not been determined"
"I have found magnetic iron sand "on the "banks of Moose River near "Lyonsdale."

Same

Page 76 Monroe Co.

"In addition to this magnetic iron,
"sand has been found in considerable
"abundance on the shores of Lake
"Ontario"

Page 83 Orange Co

"The principal mineral product
"of this County is magnetic iron
"ore of which there are vast beds
"situated chiefly in the town of
"Monroe."
"A bed of magnetic iron ore has
"been recently opened near the village
"of Cornwallville." good quality
"local situation."

Page 88 Putnam Co

"Contains several beds or veins of the
"magnetic kind, which yield ore of
"the best quality and in the greatest
"abundance."

Same

Page 53 Ontario Co

"Magnetic iron sand is found
"near Geneva".

Page 93 St. Lawrence Co

"The magnetic kind is found in
"several places and is of a good
quality".

Page 100 Seneca Co

"Magnetic iron sand and garnet
"sand are found along the whole
"sea shore".

Page 102 Warren Co.

"Iron ore has been in Warren County
"numerous and important localities
"embracing both the magnetic oxide
"and the hematite".

Same

Page 103 Washington Co.
"Iron or both of the magnetic and
"hematitic kinds have been found
"on it."

Geological Explorations of the
40th Parallel – 1877.

Page 18. Laramie Hills.
"The accessory minerals thus occur
"magnetite, chlorite" etc

Page 26. West side of Large Bar
"Magnetite in small irregular
"particles was seen in a number of
"localities."

Page 108 Bunsby & Bottleneck Creek.
"The quartz is usually quite fine
"accompanied occasionally by fine
"particles of Magnetite".

Same

Page 140 Park Range.

"Accessory minerals, garnet, magn-
"ite and gold."

Geological Survey of Indiana 1869.

No. Minerals Mentioned

Geological Reconnaissance in California 1858

Page 50 Near Castle Lake
Cañon de las Vivas.

"I found a mass of black ore which
"attracts the needle strongly, and is
"probably ordinary magnetite or-
"magnetic ore."

Page 289 El Cañon de las Vivas

"Magnetic iron ore occurs in a
"vein about three feet thick

Same.

Page 289 Williamson's pass

"Large Rolled masses of magnetite
"were picked up in the bed of one of the
"streams entering the Valley of Williamson's
"pass on the east side."

Exploration in Utah 1859

Page 269. Igneous Rocks

"Particles of specular or magnetic
"iron are a frequent occurrence
"in connection with the eruptive
"rocks of this district."

Page 323. Cedar City

"Superior magnetic iron ore occurs
"in the mountains near Cedar City."

Geology of California 60 & 64

Page 189. Cañada de las Uvas and Soledad Pass.

"Magnetic oxide of iron is also "found in this vicinity."

Page 190. Pass of the Cañada de las Uvas.

"ferruginous metamorphic rock, "containing magnetic oxide of iron."

Geology of Arkansas 1857 & 58 25

Page 217 Independence Co. (Eastport)

"Very rich iron ore but too much

"mixed with sand to admit of

"its being used profitably".

Geological Survey of the Territories

1867, 1868 & 1869. Hayden - Colorado

Page 193 Colorado

"At the source of the Cottonwood are

"immense deposits of magnetic

"iron ore in the metamorphic rocks".

Magnetic iron ore Las Vegas Mexico 20.43 pc

" " " Pacer Mountain " " 65.27

U.S. Geological & Geographical

Survey of Colorado and adjacent

Territories - 1876. Hayden.

Page 122. Colorado

"Iron is found and mined in
"Colorado on Grape Creek near
"Canyon City. "The ore is magnet-
"ite yielding a high percentage
"of the metal."

Geological Survey of Montana
1872 Hayden –
Makes no mention of Magnetite

Geological Survey of Wyoming
1871 Hayden –
Page 14 –
"In the bed of the Sheyenne, and
"on the sides of the adjacent hills
"we found immense numbers of
"rounded blocks nodules of mag-
"netic iron ore which varied of
"unusual richness

Geological Survey of Ohio
Newberry 1870.
Page 45. North eastern Ohio
"and Black-Band — as in the
"Valley of the Little Beaver — is
"introduced as another element
"into this ferruginous belt."

Report of Statistics & Geology of
the State of Indiana. 1859 — 1862 —
1866, 75 — 1874 — 1873 — 1871 — 1869 — 1880
All refer to slight and small
deposits of iron in various sections
but no bands or Magnetite.

Geological Survey of N. Carolina
Kerr 1875
Page 217.
"The ores of iron are very widely dis-
tributed in this state, including

"Magnetite, Hematite, Limonite
"and Siderite"

Page 219 Rash. Co
"Ore is often in ~~large granular~~
"quite large compact-lumps of
"a reddish-brown color, and
"slightly magnetic,"

Page 225 - five miles above the above
locality on farm of Mr Harris.
"here it is highly magnetic fine grained
"and dense - reported 30-40 feet
"thick."

"In Granville Co. is an outcrop
"of coarse granular ferruginous
"slaty magnetic ore"
"hand specimens of very coarsely
"crystalline magnetite of ten to
"fifteen pounds weight associated
"with apatite are found within
"a mile of Raleigh"

Same

Page 223. Chatham & Orange Cos.

"About 1 mile north of the Buck-
"horn mine is a small vein about
"1 foot thick of a highly magnetic
"ore". —

Page 224 Chatham & Orange -
"Besides the localities already
"mentioned, a number of additional
"outcrops of ores have been
"noted mostly magnetic; one
"2 miles north of Buckhorn (at Lewis)
"yielding 57.77 per cent of iron and
"three or 4 others in a southwest
"direction, for 10 miles to the head
"waters of Little River - at McNeils
"Dalrymple's and Buchanan's)

Page 232 - Chatham Co

"A fine quality of magnetic ore, almost
"metallic and very pure, is found on
the east side of Hard River and about

two miles distants at the foot of Terrell's Mountain on the farm of Mr. Snikes"

Page 234 Orange Co.

"A magnetic ore makes its appear-
"ance about 20 miles northeast-
"ward, 3 miles beyond the upper
"Forks of the Rouse River in the
Southeast corner of Orange County
on Knapp's of Rude creek on the
farm of Mr. Ds. Woods."

Geological Survey of Missouri
Swallow 1855

Page 153:

"At Shepherd Mountain the ore
"is usually a mixture of Specular
"and Magnetic oxides (the
Magnetic being the least abundant)

Page 72 - 2 part

"The magnetic iron ore gives a
"black powder for the magnetic test
"If now it is not inferior to any of
"the other ores, and is found at
"Shepherd Mount intermixed with
"specular iron"

Geological Survey of Missouri
by Broadhead - 1873-74

Page 176 Bates County
"On the sides of Grand Mound at the County line and also north of Rockville are exposures of Hematite or of light specific gravity but it is often too siliceous."

Page 255 - Adair County
"On the Chariton River two miles north of the south county line numerous masses of Limonite are washed out of the bluffs and strewn along the river banks, - associated with Limonite, - the "Limonite globules vary in size from a pea to 3 inches of over sixteen of an inch."

Pages 646 to 661. describe the various distributions of different deposits of Limonite from the banks of the Mississippi most of the ores being porous, sandy or sandy, but make no mention of Magnetite ores.

Geological Survey of Missouri
1853-73 Pumpelly

Gives sketches of iron deposits in the Counties. Does classify some iron as Specular Hematite - No Magnetite ores or sands mentioned.

Geological Survey of Missouri by Pumpelly in the Sixth Biennial Report 1873
Pages 196-214 - lists [illegible] locations, owners etc.
"Shepherd Mountain Iron Co. Bearing Pits"
"Pint-in Lands Iron Co. Magnetite Specular"
Are the only mentions of Magnetite ores

Exploration & Surveys west of the 100 Meridian - Wheeler 1875-[illegible]
Page 261-
An excellent quality of Magnetite is found near Iron City - in Southwestern Utah - very easy of access and in

"granites practically inexhaustible

Page 510 - Chicakani Mountain
In the vicinity of Dover Cayes
they contain magnetite in not-
ably in quantity to give it
economic value."

Explorations & surveys near the
Mississippi River with Pacific Rail Road
1853 to 1856
Entitled Zoological

Natural History of New York
Mineralogy - Lewis C. Beck, 1842
Page 392 - Localities of Magnetic
Iron Ores -
Essex County 1½ miles north of
Port Henry on Property of C. Stone
strongly attracted by the magnet.

"Lewis County, associated with magnetite iron ore at the O'Neil mine, the Rich Lion Mine, near Greenwood furnace, and in other parts of the town of Monroe."

In Connecticut, the always-alleged variety of magnetite iron ore occurs at Monroe and in Trumbull.

Page 22. Magnetite has been found on the coast of Long Island. — On the banks of the Hudson near West-Point. and on the banks of many of the streams of the Highlands. — It occurs in great abundance at Port Henry and elsewhere on Lake Champlain — On the shores of Lake Ontario in Monroe Co and on those of Seneca Lake and Lake Erie

And on the banks of Moose River at Lyndale in Lewis Co.

Mineralogy Dana, 1868
Page 154 Magnetite
"In North America it constitutes
"vast beds in the Azoic, in the
Adirondack region Warren, Essex,
and Clinton Cos in Northern New
York while in St Lawrence Co
the iron ore is mainly hematite!
Also similarly in Canada, in
Shell, Glen mill, Madoc etc and
at Lennwaxx in Pennsylvania
and at Magnet-Cove Arkansas
It also occurs in N York in
Saratoga, Herkimer, Orange and
Putnam Cos; at O'Neils mine,
Orange Co., in Chrysolas

In Maine, Raymond, Davis Hill, in an epidotic rock; at Marshall's Island, masses strongly magnetic. — In New Hampshire, at Franconia, in epidote and quartz; at Swanzey, near Keene, and Unity — In Vermont at Marlboro; Rochester, Bethel and Bridgewater, in crystals in chlorite slate. — In Conn. at Glastonbury (Haddam) in crystals — In New Jersey at Hamburg near Franklin Furnace — In Penn. at Goshen, Chester Co.; at Webb's Mine, Lebanon Co.; in dendritic delineations forming hexagonal figures, in mica at Pennsbury, and New Providence — In Maryland at Deer Creek — In California in Sierra Co. abundant

Lewis

Massive and in crystals; In Plumas Co.; Mariposa Co.; east of the Mariposa estate, on the trail to the Yosemite; Haverls, Utts ranch; Los Angeles Co. near Canada de las Uvas; El Dorado Co, near the Boston Copper Mine in sets and at the El Dorado & Calaveras copper mine. — In Canada at Sutton in crystals; Bromutites. — In N Scotia, Digby Co, Nichols Mt. in fine crystals,

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Page 59 Magnetite & specular In Vermont at Stafford, Corinth and Shrewsbury; — in many parts of Massachusetts — In Conn, in Trumbull with topaz, in Monroe and Newtown; in New York 1½ miles north east of Port Henry, Essex Co.; near

"Natural Bridge in Dianas Co.; at O'Neills mine and elsewhere in Orange Co. — In New Jersey Morris Co. at Franklin. clearable massive. — In Pennsylvania at the Cap mines Lancaster Co. Nicolliferous, — In Tennessee at Dunkelton mines abundant. — In Canada in large veins at St Jerome etc."

Page 810 Magnetite

"A Nicolliferous Magnetite occurs (according to Pelitzsch) North of Pregratten in the eastern Alps."

Agriculture and Geology of Maine 1862

Page 421 – Magnetite

Specimens of a subsurface iron Union were placed in my hands for analysis – Remarkable purity – proportion of iron 64.

Page 422 – Black Sand (Geol.)

Where the Canada road crosses this belt in Sandy Bay the veins books occurring by forming and the banks of the streams are full of the black sands.

Page 372 Magnetic Iron

"In the north western section of Linneus, iron ore is found combined with the slate – Specimens were obtained that were strongly magnetic"

The Iron Region

Foster and Whitney 1851

Page 18. Michigan - Southward from Teal Lake -

"Chlorite slates and vast masses of specular and magnetic oxide of iron"

Page 22 - "On the north side of Machi-
"quinné in numerous slaty mag-
"netic iron is seen associated with
"hornblende or quartz"

Also in various other places in the Lake Superior Regions -

Geology of Massachusetts -

1833 Hitchcock -

Page 230 - Iron sand

"Bushelles of this substance may
"sometimes be collected on the
"Montague shore of Connecticut River

40 rods below Turner's Falls.

Geology of Vermont Adams 1845-
Page 23 - "Iron sands in the soil of Taconic slate regions"
Page 217 "Magnetic Iron ore in the form of iron sand in considerable quantities occur in the sand beach just north of Clay point." Waterford Co (?)

Geology of Wisconsin 1873-77 Vol. 2.
Page 239.
Magnetic iron, some potentially known as black sands on the entire shores of the lake - (probably Lake Michigan)

Geology of Massachusetts 1841

No Mention of sands

American Cyclopedia
Page 457. Vol. IX
"Lake Superior Ore beds iron ores are magnetite in composition and have been changed to sesquioxide by the addition of oxygen.
"All the Missouri specular iron is more or less magnetic."

Same page 409. Magnetite
"Vast beds in the region of the Adirondack region, Warren, Essex, and Clinton Cos. in Northern New York —

In Morris, Sussex, Warren, and Passaic Co N. J. — Cornwall in Lebanon Co. Penna. at Shue, Grenville, Mass, &c. in Canada — Greensboro North Carolina — Large deposits in Sierra Co. Cal. — and in Oregon.